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# **WATER SUPPLY OUTLOOK FOR WYOMING**

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MAR 3 - 1967

CURRENT SERIAL RECORDS

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE,

and

STATE ENGINEER of WYOMING

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, and other Federal, State and private organizations.

AS OF  
**FEB. 1, 1967**

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Mast of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made at later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

### PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Calarada (N. Mex.)	12417 Federal Building, Denver, Calarada 80202
Idaho	P. O. Box 38, Boise, Idaho 83701
Mantana	P. O. Box 855, Bismarck, Mantana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4001 Federal Building, Salt Lake City, Utah 84111
Washington	840 Ban Marche Bldg., Spokane, Washington 99206
Wyoming	P. O. Box 340, Casper, Wyoming 82602

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



FEDERAL-STATE-COOPERATIVE  
SNOW SURVEYS AND WATER FORECASTS

FOR  
WYOMING

Issued  
February 1, 1967

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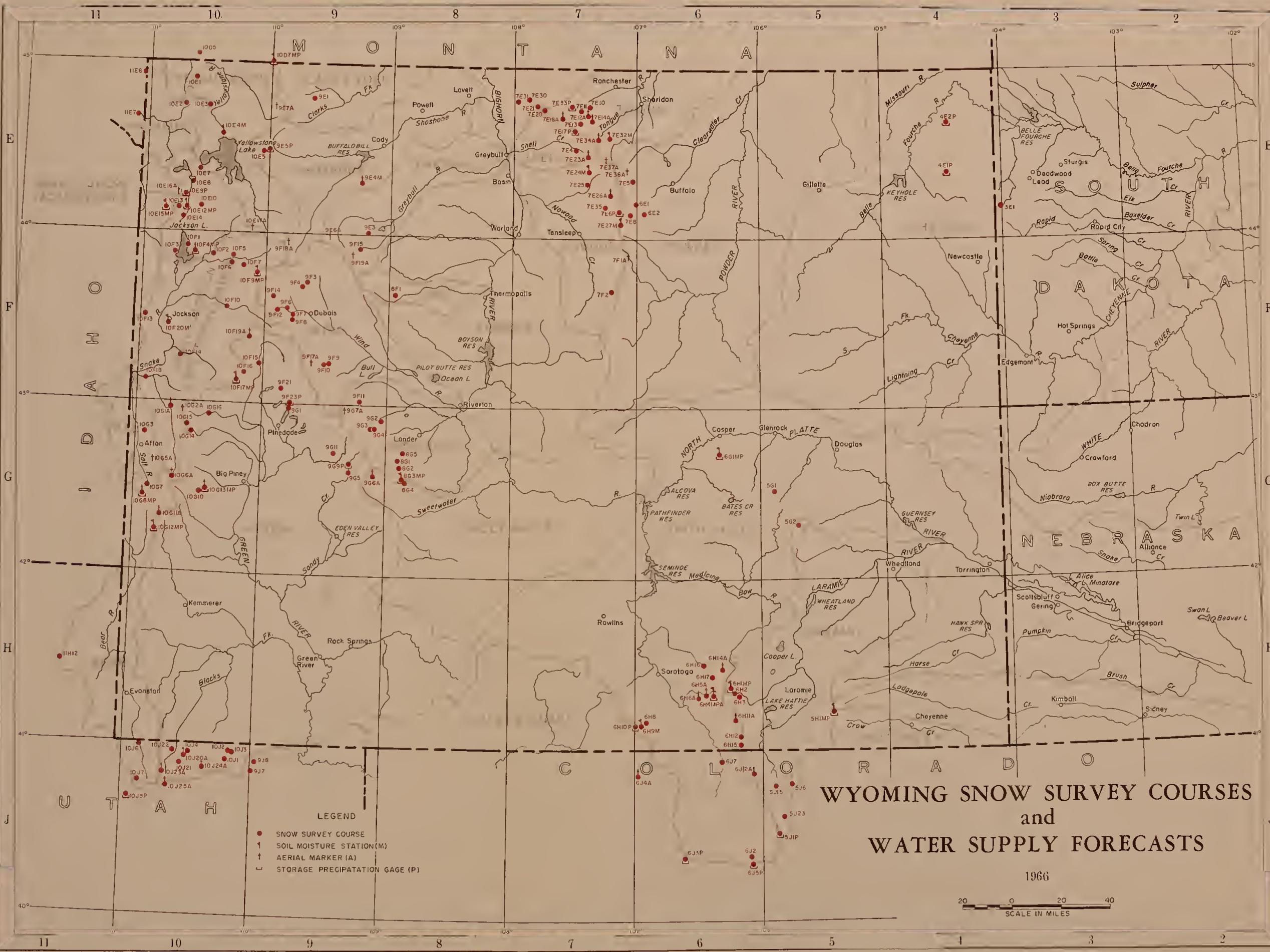
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# INDEX TO WYOMING SNOW COURSES

DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	ELEV.	LOCATION		RECORD BEGAN	MEAS. <sup>a</sup> DATES	MEAS. <sup>b</sup> BY	DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	LOCATION		RECORD BEGAN	MEAS. <sup>a</sup> DATES	MEAS. <sup>b</sup> BY	DRAINAGE BASIN AND COURSE NAME	WYOMING NUMBER	LOCATION		RECORD BEGAN	MEAS. <sup>a</sup> DATES	MEAS. <sup>b</sup> BY															
			SEC.	TWP.						SEC.	TWP.						SEC.	TWP.																		
<b>MISSOURI RIVER DRAINAGE</b>																																				
<b>Madison River</b>																																				
Norris Basin	10E2	7500	42° 41'	110° 42'	1936	2,3,4,5,	2	Five Springs Falls	7E31	7500	19	56N	92W	1956	2,3,4,5,	1	Big Sandy Opening	969P	9220	17	31W	102W	1961	2,3,4,5	1,											
21 Mile	11E6	7150	1	11S	5E	1934	1,2,3,4,5	1	Medicine Wheel	7E30	9000	24	56N	92W	1956	2,3,4,5	1,6	Blind Bull Summit	1002A	8750	6	34W	115W	1948	2,3,4	1										
West Yellowstone	n	6700	3	13S	5E	1934	1,2,3,4,5	1									Dutch Joe R.S.	905	8700	32	31W	104W	1936	2,3,4,5	1,											
<b>Yellowstone</b>																																				
Canyon	10E5	7750	42° 44'	110° 50'	1938	1,2,3,4,5	1	Beaver-Tongue Divide	7E20	9200	12	55N	91W	1956	2,3,4,5	1,6	Elk Heart Park C.S.	9723P	9400	16	35W	103W	1961	2,3,4,5	1,											
Crevice Mountain	11E5	5100	22	OS	9E	1935	3,4										Cros Ventre	10F19A	8750	36	40W	111W	1942	2,3,4,5	1,											
East Entrance	9E5MP	7000	24° 29'	110° 00'	1948	1,2,3,4,5	2	Bone Spring Divide	7E18A	9200	32	55N	89W	1956	2,3,4,5	1,6	Kendall R.S. #2	10F15	7900	23	38W	110W	1961	2,3,4,5	1,											
Lake Camp #2	10E4M	7550	42° 34'	110° 24'	1937	1,2,3,4,5	1	Burgess R.S. #2	7E33P	7900	36	56N	89W	1955	2,3,4,5	1,6	Loomis Park #2	10F16	8500	14	37W	111W	1960	2,3,4,5	1,											
Lupine Creek	10E1	7300	42° 54'	110° 37'	1938	1,2,3,4,5	2	Dome Lake #2	7E34A	8800	11	53N	87W	1950	2,3,4,5	1,6	Mulligan Park	961	8900	28	35W	108W	1936	2,3,4,5	1,											
Northwest Entrance	10E4NP	7000	33	9S	11E	1935	1,2,3,4,5	2	Geneva Pass	7E37A	10600	30	52N	86W	1961	2,3,4,5	1	New Fork Lake	9F21	8325	11	36W	109W	1961	2,3,4,5	1,										
Parker's Peak	9E2	9400	42° 41'	110° 56'	1965	2,3,4	1	Gloom Creek	7E14A	9300	32	55N	87W	1956	2,3,4,5	1,6	North Horse Creek	10C16	8200	12	34W	112W	1961	2,3,4,5	1,											
Patches	11E2	8600	42° 41'	110° 22'	1935	2,3,4	1	Granite Pass	7E17P	8950	19	52N	88W	1956	2,3,4,5	1,6	Piney LaBarge #2	10C10	8820	19	29W	114W	1959	2,3,4,5	1,											
Thimble Divide	10E7	7900	24° 22'	110° 35'	1946	2,3,4	5	Sibley Lake	7E11	8000	10	53N	87W	1956	2,3,4,5	1,6	Pocket Creek	9G11	9360	19	32W	105W	1961	2,3,4,5	1,											
Mc Ocean Plateau	10E1T	9200	42° 08'	110° 14'	1965	2,3,4	1	Steamboat Point	7E10	7500	32	56N	87W	1956	2,3,4,5	1,6	Poison Meadows	10G6A	8500	29	30W	116W	1948	2,3,4,5	1,											
Sylvan Pass	10E5	7100	42° 28'	110° 02'	1936	1,2,3,4,5	2	Sucker Creek	7E12A	9000	19	55N	87W	1956	2,3,4,5	1,6	Snyder Basin R.S. #2	10G13MP	8040	15	29W	112W	1956	2,3,4,5	1,											
<b>Clark's Fork</b>																																				
Lodgepole	9E1	5200	32	56N	106W	1940	2,3,4,5	1,4	Bear Trap	7F1A	8000	10	45N	85W	1960	2,3,4,5	1	Big Park	10G11A	8700	7	27W	117W	1951	2,3,4,5	1,										
Parker's Peak	9E5	9400	42° 41'	109° 50'	1965	2,3,4	1	Clouds Peak	7E36A	10000	15	51N	85W	1960	2,3,4	1	Black's Fk Junc. u	10J22	8925	33	31W	12E	1951	3,4,5	1											
<b>Wind River</b>																																				
Big Warm	9E52	5200	30	42W	109W	1955	2,3,4,5	1	Muddy Creek C.S.	7F2	7400	16	43N	86W	1960	2,3,4,5	1	Buck Pasture u	10J23A	9700	14	17W	111W	1963	2,3,4,5	1,										
Burroughs Creek	9F1	5100	15	43W	107W	1948	2,3,4,5	1	Munkres Pass	7E8	9700	11	48N	85W	1950	2,3,4,5	1	East Fk Black's Fk u	10J21	9300	25	29W	12E	1951	3,4,5	1										
Dimwoodie	9F10	10000	9	3W	6W	1948	2,3,4,5	1,3	Onion Culch	7E27M	8100	31	48N	85W	1956	2,3,4,5	1	Elk River c	6J4	8700	6	10N	85W	1936	2,3,4,5	1										
Dimwoodie Glaciers	9F1TA	10500	42° 16'	109° 38'	1959	2,3,4	1	Powder River Pass	7E6P	8200	1	48N	86W	1956	2,3,4,5	1	Hayden Fork u	10J17	9300	1	18W	92	1951	4,5	1											
Dry Creek	9F9	9500	10	3N	6W	1948	2,3,4,5	1,3	Soldier Park	7E5	8700	36	51N	85W	1950	2,3,4,5	1,6	Henry's Fork u	10J2LA	10200	5	11W	12E	1963	2,3,4,5	1										
Duboir	9F6	8700	27	42W	108W	1940	2,3,4,5	1	Sour Dough	6E1	8500	17	49N	84W	1936	2,3,4,5	1,6	Hewitts R.S. u	10J4	9500	33	31W	13E	1951	3,4,5	1										
Geysir Creek	9F7	8500	12	41W	108W	1948	2,3,4,5	1									Hickerson Park u	9J8	9100	24	21W	17E	1951	3,4,5	1											
Little Warm	9F8	9500	21	41W	108W	1948	2,3,4,5	1								Hole-in-the-rock u	10J1	9150	13	21W	15E	1931	4	1												
Sheridan R.S. #2	9F1L	7500	3	42W	109W	1955	2,3,4,5	1								Hole-in-the-rock CS u	10J3	8300	32	31W	16E	1951	4	1												
7-Mile Ranch	9F3	8500	1	43W	107W	1940	2,3,4,5	1								Kelley R.S.	10G12MP	8200	13	26W	118W	1951	2,3,4,5	1,												
Logwood Pass	10F9MP	9600	29	4W	110W	1936	2,3,4,5	5								Lake Fork Basin u	10J25A	11100	13	18W	11E	1952	2,3,4,5	1												
<b>Popo Agie River</b>																																				
Blue Ridge	8G2	9500	23	31W	101W	1939	2,3,4,5	1									South Pass	8G3MP	9000	13	30N	100W</														

WATER SUPPLY OUTLOOK  
FOR  
WYOMING

February 1, 1967

The mountain snow pack throughout Wyoming is close to the average February 1 accumulation. In general, the northwest corner of the state is 15 percent above normal, the Big Horn Watersheds 15 percent below normal and the balance of the state close to average amount for this time of the year. A portion of the existing snow storage will be required to bring the mountain soils to field capacity, and snow pack evaporation in the alpine areas has been a little above average.

The following forecasts of the ensuing summer runoff are based on the assumption that storms will deposit average amounts of snow for the balance of the winter.

THE NORTH PLATTE Watershed will discharge 805,000 acre feet of snowmelt runoff into Seminoe Reservoir this summer. This is 8 percent above the 15 year average. It is also the combined total of 7 percent above normal for the Encampment River, 1 percent below, for the North Platte at the Colorado-Wyoming border, 8 percent above for the North Platte at Saratoga and 1 percent above for the April 1 to September 30 flow of the Medicine Bow River near Hanna. The Laramie River Watershed forecast formula indicates 7 percent above average.

Deer Creek, below Casper is expected to yield a March 1 - July 30 runoff of 16 percent above normal. The Laramie River's snow surveys indicate 7 percent above.

The North Platte Reservoir system from Seminoe to Guernsey has a combined storage of 54 percent of the average February 1 contents and 23 percent of usable capacity.

THE BIG HORN MOUNTAINS contain less than normal supplies for the coming season. Shell, Tensleep and Medicine Lodge Creeks on the west side are from 10 to 15 percent below normal. The east flank of the mountains are ranging from 10 percent below normal in the north to 15 percent less than average in the south. Heavy precipitation is needed to bring this area up to normal.

THE GREEN RIVER BASIN outlook is considerably better. Forecasts of the tributaries to the Green range from average to 7 percent above with 6 percent above normal entering Flaming Gorge Reservoir.



THE WIND RIVER area ranges from a minus 4 percent of average at Dubois up to 10 percent above for the Little Popo Agie near Lander.

The Shoshone River will contribute slightly less than normal supplies to Buffalo Bill Reservoir.

Bull Lake and Pilot Butte Reservoirs are close to the average contents for February 1, Boysen Reservoir is 57 percent above normal and Buffalo Bill Reservoir contents are 10 percent above.

THE SNAKE RIVER BASIN presents the most optimistic picture at this date with a plus 11 percent feeding Jackson Lake and 8 percent above contributing to the storage in Palisades Reservoir. The Greys and Salt River tributaries from the south will yield 3 percent above average to Palisades.

Jackson Lake storage is 19 percent above the average for February 1, but Palisades Reservoir is down to a minus 29 percent of average contents.

Yellowstone Park is expected to have adequate supplies this summer. 8 percent above normal will flow under Fishing Bridge. The maximum lake level will be 5.35 feet above the established datum. The maximum on record was 6.54 feet in 1956 and the lowest - 0.10 feet in December, 1931.



## WYOMING STREAM-FLOW FORECASTS, FEBRUARY 1, 1967

BASIN AND TRIBUTARY	April - September 30 <u>Seasonal Stream-Flow in Thousands of Acre Feet</u>			
	Forecast Runoff	% 15-Year Average	Measured Runoff 1965	15-Yr. Avg. 1948-62
YELLOWSTONE RIVER				
Yellowstone Lake Outlet (at)	860	108%	1066	793
LITTLE POPO AGIE				
Lander (near)	46	110%	86	42
BULL LAKE CREEK				
Lenore (near)	171	97%	187	177
WIND RIVER				
Dubois (near)	96	96%	153	100
TENSLEEP CREEK				
Tensleep (near)	61	85%	96	72
MEDICINE LODGE CREEK				
Hyattville (near)	16.1	88%	28	18.2
SHELL CREEK				
Shell (near)	56	89%	93	63
SHOSHONE RIVER				
Buffalo Bill Dam (below) (1)	797	99%	1034	805
CLARK'S FORK				
Chance (at)	580	99%	763	586
LARAMIE RIVER				
Jelm (near) (2)	120	107%	144	112
ENCAMPMENT RIVER				
Encampment (near)	158	107%	215	148
NORTH PLATTE RIVER				
Northgate (near)	260	100%	382	260
Saratoga (at)	690	108%	909	641
Sinclair (near)	720	109%	940	660
ROCK CREEK				
Arlington (at)	49	104%	63	47
MEDICINE BOW RIVER				
Hanna (near)	85	101%	126	84
DEER CREEK (Mar-July)				
Glenrock (at)	27	116%	53	23.2



WYOMING STREAM-FLOW FORECASTS, FEBRUARY 1, 1967

BASIN AND TRIBUTARY	April 1 - September 30			
	Forecast Runoff	Seasonal Stream-Flow in Thousands of Acre Feet		
		% 15-Year Average	Measured Runoff	
			1965	15-Yr. Avg. 1948-62
<b>GREEN RIVER</b>				
Warren Bridge (at)	350	107%	446	326
LaBarge (near)	984	107%	1567	920
Green River (at)	1030	106%	1677	970*
<b>LITTLE SNAKE</b>				
Dixon (near)	307	104%	383	295
<b>NORTH PINEY CREEK</b>				
Mason (at)	40	105%	53	38
<b>NEW FORK RIVER</b>				
Boulder (near)	230	100%	379	228
<b>BIG SANDY CREEK</b>				
Big Sandy (near)	55	105%	96	52
<b>LITTLE SANDY CREEK</b>				
Elkhorn (near)	13.6	105%	22	13
<b>BEAR RIVER</b>				
Utah-Wyo. State Line (at)	120	104%	194	115
<b>SNAKE RIVER</b>				
Moran (at) (3)	960	111%	1126	865
Palisades (above)	2810	108%	3418	2600
<b>PACIFIC CREEK</b>				
Moran (near)	193	114%	250	170
<b>GREYS RIVER</b>				
Palisades (above)	390	102%	506	383*
<b>SWIFT CREEK</b>				
Afton (near)	48	100%	48	48
<b>SALT RIVER</b>				
Etna ab. Palisades	340	103%	455	331*
<b>SMITHS FORK</b>				
Border (near)	115	103%	164	112
<b>THOMAS FORK</b>				
State Line (near)	30	100%	57	30

All stream data taken from observed flow record with the following exceptions:

- (1) Observed flow corrected for Buffalo Bill storage and Hart Mountain Diversion.
- (2) Observed flow corrected for Transbasin Diversions.
- (3) Observed flow corrected for Jackson Lake Storage.

\* Includes some estimated flows.



WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1967

Drainage Basin and Snow Course	Number or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS				PAST RECORD	
				1967 Snow Depth (In.)	Water Content (In.)	Water Content 1966	1965 Average	1948-62 Average	
<u>MADISON RIVER - YELLOWSTONE PARK</u>									
Norris Basin	10E2	7500	2/2	41	10.5	5.8	11.5	6.9*	
21 Mile	11E6	7150	1/29	60	16.6	10.4	23.1	12.1	
West Yellowstone	11E7	6700	1/29	45	7.5	5.8	13.4	7.8	
<u>UPPER YELLOWSTONE - YELLOWSTONE PARK</u>									
Canyon	10E3	7750	1/30	50	13.5	7.7	21.7	9.4	
East Entrance #2	9E5	7000	1/31	30	7.0	5.7			
Lake Camp #1	10E4	7850	1/31	40	9.2	4.5	12.1		
Lake Camp #2	10E4	7850	1/31	38	8.3	4.0	10.9	6.5*	
Lupine Creek	10E1	7300	1/31	45	10.1	5.7	10.4	7.3	
Norris Basin	10E2	7500	2/2	41	10.5	5.8	11.5	6.9*	
Northeast Entrance	10D7MP	7400	1/30	35	8.6	3.8	10.4	5.8	
Parker's Peak	9E7A	9400	2/1	77A	23.0e	N.R.	N.R.		
Pitchstone Plateau	10E16A	8640	2/1	121A	38.0e	25.5e	47.0e		
Sylvan Pass	10E5	7100	1/31	40	10.0	7.7	16.0	9.3*	
Thumb Divide	10E7	7900	1/30	68	18.8	15.4	27.3	14.4*	a
Two Ocean Plateau	10E17A	9200	2/1	87A	27.0e	18.5e	33.0e		
<u>LOWER YELLOWSTONE - CLARK'S FORK</u>									
Lodgepole	9E1	8200	2/1	37	8.8	4.6	10.0	6.6*	
Parker's Peak	9E7A	9400	2/1	77A	23.0e	N.R.	N.R.		
<u>LOWER YELLOWSTONE - WIND RIVER</u>									
Big Warm	9F12	8800	1/26	31	6.8	4.2	7.9	5.1*	
Burroughs Creek	9F4	8800	1/23	37	9.1	7.4	16.1	10.0*	
Dinwoodie	9F10	10000	1/29	34	8.3	4.9	11.1	8.2*	
Dinwoodie Glaciers	9F17A	10500	2/1	37A	9.0e	7.5e	18.5e	6.3*	
Dry Creek	9F9	9500	1/29	20	5.0	2.7	6.2	4.5*	
DuNoir	9F6	8750	1/26	27	6.0	3.7	7.8	5.4*	
Geyser Creek	9F7	8500	1/27	22	4.9	2.3	7.3	5.7	
Little Warm	9F3	9500	1/27	47	11.1	7.4	14.4	11.3*	
Sheridan R. S., #2	9F14	7500	1/26	25	5.2	3.7	7.9	4.0*	
T-Cross Ranch	9F3	8000	1/28	18	4.1	4.0	10.3	4.7	
Togwotee Pass	10F9MP	9600	1/23	74	20.1	14.6	29.1	19.6	
Twenty Lakes	9F7A	10000	2/1	29A	9.5e	3.0e	16.5e	4.0*	a



## WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1967

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS				
			1967		PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In)	WATER CONTENT (In.)	1948-62 AVERAGE
<u>LOWER YELLOWSTONE - OWL CREEK</u>							
Owl Creek	8F1	8700	1/29	14	2.6	1.3	4.5
<u>LOWER YELLOWSTONE - POPO AGIE RIVER</u>							
Blue Ridge	8G2	9500	2/2	42	11.5	5.8	16.4
Brace's Camp	8G5	6500	2/3	9	3.3	1.2	1.2
Hobb's Park	9G3	10000	1/31	50	15.1	8.0	17.6
Mosquito Park R. S.	9G4	9500	1/31	30	7.5	2.8	9.1
Sawmill Glade	8G1	8500	2/3	24	7.9	2.9	8.3
South Pass	8G3MP	9000	2/2	49	13.2	8.7	18.9
St. Lawrence R. S.	9F11	9000	1/30	27	6.8	3.4	10.2
Trout Creek	9G2	8400	1/31	18	4.8	2.5	4.1
Twenty Lakes	9G7A	10000	2/1	39A	9.5e	3.0e	16.5e
<u>LOWER YELLOWSTONE - GREYBULL RIVER</u>							
Absaroka Divide	9E6A	10000	1/31	41A	10.0e	N.R.	N.R.
Timber Creek #2	9E3	8800	1/30	6	1.2	0.9	3.0
Wood River #2	9F15	8000	1/30	17	3.3	1.6	6.4
<u>LOWER YELLOWSTONE - SHOSHONE RIVER</u>							
Carter Mountain	9E4M	7800	1/31	10	2.3	0.9	4.9
East Entrance #2	9E5	7000	1/31	30	7.0	5.7	
Sylvan Pass	10E5	9200	1/31	40	10.0	7.7	16.0
Togwotee Pass	10F9MP	9600	1/28	74	20.1	14.6	23.1
Younts Peak	9F18A	8500	2/1	68A	20.0e	N.R.	20.0e
<u>LOWER YELLOWSTONE NOWOOD CREEK</u>							
Bear Trap	7F1A	8000	1/31	33A	8.0e	2.0e	12.0e
Cold Springs Camp	7E25	8700	1/26	22	3.8	1.8	10.6
Medicine Lodge Lakes	7E24MP	9500	1/26	35	7.1	3.3	N.R.
Middle Powder	7F2	7400	1/28	44	10.9	2.0	12.5
Munkres Pass	7E8	9700	2/1	29	6.5	2.5	9.4
Onion Gulch	7E27M	8100	2/1	27	5.8	3.3	6.8
Tyrell R. S.	7E35	8300	1/27	29	5.8	2.1	8.0
West Tensleep Lake	7E26A	9075	1/27	32	6.4	3.2	16.0e
Cold Springs Camp #2	7E25	8700	1/26	25	4.8	2.5	8.0*a



WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1967

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey	1967 Snow Depth (In.)	Water Content (In.)	PAST RECORD		
				1966	1965	Average	1948-62	
<u>LOWER YELLOWSTONE - SHELL CREEK</u>								
Cald Mountain	7E21M	9600	1/27	52	14.0	9.3	20.7	13.0*
Beaver Tongue Divide	7E20	9200	1/27	50	13.5	7.6	18.4	12.6*
Bone Spring Divide	7E18A	9200	1/31	50A	13.5e	5.7e	18.0e	10.4*a
Granite Pass	7E17P	8950	1/30	38	9.3	5.6	15.7	11.0*
Ranger Creek	7E4	8800	1/29	27	6.1	N.R.	12.9	6.7*
Ranger Creek #2	7E4	8800	1/29	27	6.2	2.9		
Shell Creek	7E23	9600	1/29	35	7.6	5.2	17.5e	10.0*
<u>LOWER YELLOWSTONE - TONGUE RIVER</u>								
Beaver Tongue	7E20	9200	1/27	50	13.5	7.6	18.4	12.6*
Big Goose #2	7E32M	7700	1/31	23	5.5	1.0	6.6	5.2*
Bone Spring Divide	7E18A	9200	1/31	50A	13.5e	5.7e	18.0e	10.4*a
Burgess R. S. #2	7E33P	7900	1/28	25	5.9	1.4	7.4	5.1*
Dome Lake #2	7E34A	8800	1/31	26A	6.0e	2.0e	12.0e	6.1*
Geneva Pass	7E37A	10600	1/31	42A	11.0e	6.5e	19.5e	8.2*a
Gloom Creek	7E14A	9300	1/31	38A	9.5e	2.0e	16.0e	8.3*a
Granite Pass	7E17P	8950	1/30	38	9.3	5.6	15.7	11.0*
North Tongue	7E15	8800	1/28	39	10.4	2.9	12.1	8.0*
Sibley Lake	7E11	8000	1/30	32	7.5	2.4	9.8	6.9*
Steamboat Point	7E10	7500	1/30	20	5.4	1.3	7.0	4.7*
Sucker Creek	7E12A	9000	1/31	35A	8.5e	2.0e	15.5e	7.5*a
Wood Rock G. S.	7E13	8500	1/31	30	7.4	2.3	11.1	7.2*
<u>LOWER YELLOWSTONE - PORCUPINE CREEK</u>								
Five Springs Falls	7E31	7500	2/2	18	4.7	2.0	9.6	4.1*
Medicine Wheel	7E30	9000	1/27	40	10.0	4.3	16.4	10.0*
<u>LOWER YELLOWSTONE - POWDER RIVER</u>								
Bear Trap	7F1A	8000	1/31	32^	8.0e	2.0e	12.0e	6.0*
Clouds Peak	7E36A	10000	1/31	33A	8.0e	2.0e	10.5e	6.7*a
Middle Powder	7F2	7400	1/28	44	10.9	2.0	12.5	7.1*
Muddy Creek G. S.	6E2	7500	2/1	12	2.5	1.5	3.0	2.9*
Munkres Pass	7E8	9500	2/1	29	6.5	2.5	9.4	6.5*
Onion Gulch	7E27M	8100	2/1	27	5.8	3.3	6.8	6.7*
Soldier Park	7E5	8700	2/2	21	5.0	1.5	7.1	3.2*
Sour Dough	6E1	8500	2/2	22	4.5	2.7	4.9	4.8*
Powder River Pass	7E38	9666	2/1	37	8.4	New Snow Course		



## WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1967

Drainage Basin and Snow Course	Number or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS			
				1967	Snow Depth (In.)	Water Content (In.)	PAST RECORD
				1966	1965	Average	1948-62
<u>NORTH PLATTE - LARAMIE RIVER</u>							
Albany	6H1A	9400	2/1	35	9.0	7.5e	N.R.
Brooklyn Lake #2	6H1MP	10200	2/2	52	14.5	10.8	18.7
Cameron Pass <sup>c</sup>	5J1	10300	1/28	48	14.9	14.2	15.6
Chambers Lake <sup>c</sup>	5J2	9000	1/28	20	4.7	3.1	8.0
Deadman Hill <sup>c</sup>	5J6	10300	1/31	32	7.4	10.8e	N.R.
Evans	6H15	9000	1/30	23	5.6	5.2	8.7
Foxpark	6H12P	9200	1/31	21	4.1	2.7	7.4
Hairpin Turn #3	6H2	9500	2/2	38	10.8	6.5	13.6
LaBonte	5G2	8450	1/29	14	2.2	1.0	3.9
Libby Lodge #1	6H3	8700	2/2	26	6.5	4.3	9.3
Libby Lodge #2	6H3	8700	2/2	30	7.7	4.3	7.0
Lost Lake <sup>c</sup>	5J23	9300	1/28	25	5.9	4.9	11.5
Pole Mountain #2	5H1	8700	1/30	16	4.3	2.0	3.9
Roach <sup>c</sup>	6J12A	9800	No Report			8.4e	N.R.
Rock Creek #1	6H14	9800	1/27	59	15.8	13.0	14.8
<u>NORTH PLATTE - ABOVE SEMINOE RESERVOIR</u>							
Albany	6H1A	9400	2/1	35	9.0	7.5e	N.R.
Bottle Creek #1	6H8	8200	1/30	37	9.8	6.0	14.6
Bottle Creek #2	6H8	8200	1/30	36	9.1	6.5	
Boxelder #2	5G1	7500	1/31	16	4.0	2.2	2.4
Cameron Pass <sup>c</sup>	5J1A	10300	1/28	48	14.9	14.2	15.6
Casper Mountain	6G1MP	7940	2/1	41	12.0	6.0	6.5
Columbine <sup>c</sup>	6J3	9300	1/27	50	12.9	12.5	17.4
Deep Lake	6H17	10500	1/27	80	23.1	24.0	25.4
Evans	6H15	9000	1/30	23	5.6	5.2	8.7
Foxpark	6H12P	9200	1/31	21	4.1	2.7	7.4
LaBonte	5G2	8450	1/29	14	2.2	1.0	3.9
Moss Lake	6H16	9800	1/27	51	13.4	11.7	17.3
North Barrett Creek	6H5AM	9400	1/28	47	12.5	12.0e	N.R.
North French Creek	6H4AP	10200	1/28	64	19.1	17.0e	N.R.
Northgate <sup>c</sup>	6J7	8500	1/30	20	5.0	3.4	5.0
Old Battle #1	6M10P	9800	1/30	72	20.5	16.6	26.5
Park View <sup>c</sup>	6J2	9200	1/31	30	7.1	5.4	8.2
Roach <sup>c</sup>	6J12A	9800	No Report			8.4e	N.R.
Rock Creek #1	6H14	9800	1/27	59	15.8	13.0	14.8
Ryan Park	6H6A	8400	1/28	31	7.8	3.0e	N.R.
Webber Spring #2	6H9M	9000	1/30	52	13.4	9.6	
Webber Spring #1	6H9M	9000	1/30	46	11.7	7.6	19.1
Willow Creek Pass <sup>c</sup>	6J5	9500	1/31	41	10.4	7.7	9.6



## WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1967

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			Date of Survey	Snow Depth (in.)	Water Content (in.)	PAST RECORD		
						1967	1936	1965
<u>NORTH PLATTE - CROW CREEK</u>								
Pole Mountain #2	5H1	8700	1/3	16	4.0	2.0	3.9	3.1
<u>NORTH PLATTE - SWEETWATER</u>								
Grannier Meadows	8G4	9000	2/2	48	12.8	7.3	17.4	9.3*
Larsen Creek	9G6A	9000	2/1	37A	8.0e	7.0e	17.0e	7.3*
South Pass	8G3MP	9000	2/2	49	13.2	8.7	18.9	9.8*
<u>NORTH LARAMIE MOUNTAINS</u>								
Boxelder #2	5G1	7500	1/31	16	4.0	2.2	2.4	4.4*
Casper Mountain	6G1MP	7940	2/1	41	12.0	6.0	6.5	7.8*
LaBonte	5G2	8450	1/29	14	2.2	1.0	3.9	3.9*
<u>GREEN RIVER ABOVE GREEN RIVER</u>								
Big Sandy Opening	9G9P	9220	1/31	41	9.5	7.2	15.4	8.5*
Blind Bull Summit	10G2A	8750	1/28	62A	19.0e	15.0e	26.0e	14.7*
Dutch Joe R.S.	9G5	8700	1/30	34	7.2	5.9	12.2	6.4*
East Rim Divide	10F17MP	7950	2/1	32	7.8	5.2	14.2	6.4*
Elk Heart Park G.S.	9F23P	9400	1/30	35	8.0	5.3	18.0	10.0*
Gros Ventre	10F19A	8750	1/28	36A	9.0e	5.5e	14.5e	3.1*
Dendall R.S. #2	10F15	7900	2/1	36	8.4	6.1	15.3	8.5*
LaBarge G.S.	10G16	9500	1/29	71	21.8	New Snow Course		
Loomis Park #2	10F16	8500	2/1	48	12.5	8.5	25.1	10.8*
Mulligan Park	9G1	8900	1/30	25	5.8	4.9	13.0	7.3*
New Fork Lake	9F21	8325	2/1	33	7.2	5.1	14.9	
North Horse Creek	10G16	8200	1/30	58	16.4	12.1	25.9	
Piney LaBarge #2	10G10	8820	1/29	56	16.9	11.1	28.5	12.4
Pocket Creek	9G11	9260	1/31	32	8.1	6.6	12.1	
Poison Meadows	10G6A	8500	1/29	72	22.2	14.4	32.0e	18.7*
Snyder Basin #2	10G13MP	8040	1/29	39	10.9	9.0	22.4	10.4*
Soda Lake	10G14	8300	1/31	45	13.2	10.5	22.9	11.1*
South Pass	8G3MP	9000	2/2	49	13.2	8.7	18.9	9.8*
Triple Peaks	10G15	8500	1/31	62	18.9	15.0	32.3	15.4*



## WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1957

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS					
			1967			PAST RECORD		
			Date of Survey	Snow Depth (in.)	Water Content (in.)	Water Content (in.)	1966	1965
<u>GREEN RIVER BELOW GREEN RIVER</u>								
Big Park	10G11	8700	1/28	47	13.1	11.2	25.0	10.3*a
Elk River*	GJ4	8700	1/28	48A	12.2e	10.4e	14.8e	11.5
Kelly R.S.	10G12	8200	1/28	39	11.0	9.6	21.7	
Old Battle	6H10P	9800	1/30	72	20.5	16.6	26.5	20.0
<u>JACKSON LAKE TO PALISADES</u>								
Afton R.S.	10G4	6200	1/30	10	3.0	2.9	3.9	3.7
Base Camp	10F2	6900	1/28	56	15.9	12.4	23.8	11.5
Blackrock	10F7	8600	1/28	53	13.8	10.8	20.3	14.4
Blind Bull Summit	10G2a	8750	1/28	62A	19.0e	15.0e	26.0e	14.7*a
Bryan Flat	10F14	6250	2/2	24	6.2	6.5	11.5	7.0
CCC Camp	10G7	7500	1/30	31	8.4	5.4	13.4	7.8
Cottonwood Lake	10G5A	7500	1/27	47A	13.0e	11.5e	18.0e	10.7*
East Rim Divide	10F17MP	7950	2/1	32	7.8	5.2	12.3	6.4*
Four Mile Meadows	10F6	7770	1/28	35	8.0	6.9	12.3	9.0
Grey's Boundary	10F18	5800	1/30	28	8.3	4.9	9.1	7.8
Gros Ventre	10F19A	8750	1/28	36A	9.0e	5.5e	14.5e	8.1*a
Grover Park Divide	10G3	7500	1/31	31	8.0	5.9	12.4	7.7
LaBarge G.S.	10G16	9500	1/29	71	21.8	New Snow Course		
Loomis Park #2	10F16	8500	2/1	48	12.5	8.5	25.1	10.8*
Poison Meadows	10GGA	8500	1/29	72	22.2	14.4	31.5e	18.7*
Salt River Summit	10GBMP	7900	1/30	41	11.2	8.5	16.6	10.2*
Snow King Mtn. #3	10F20M	7600	2/2	47	11.7	8.5	15.9	9.0*
Teton Pass #2	10F13	8500	1/30	78	23.2	13.5	28.7	23.0
Togwotee Pass	10F9MP	9600	1/28	74	20.1	14.6	28.1	19.6
Turpin Meadows	10F5	6930	1/28	31	7.1	5.8	10.6	7.5
Young's Ranch	10G1A	6534	1/28	42A	11.5e	8.5e	16.5e	6.2*a



## WYOMING SNOW SURVEYS - ABOUT FEBRUARY 1, 1967

Drainage Basin and Snow Course	Number or State	Elev.	SNOW COVER MEASUREMENTS				PAST RECORD		
			Date of Survey	Snow Depth (In.)	Water Content (In.)	1966	1965	1948-62 Average	

SNAKE RIVER ABOVE JACKSON LAKE

Arizona	10F1	6850	1/29	53	15.4	11.4	19.8	11.8a
Astor Creek	10E8	7700	1/30	91	26.6	20.5	33.9	20.4a
Base Camp	10F2	6900	1/28	56	15.9	12.4	23.8	11.5a
Glade Creek	10E13	7200	1/29	52	14.8	13.3	20.6	14.4a
Grassy Lake	10E15MP	7265	1/29	79	23.9	19.1	32.8	22.3
Huckleberry Divide	10E14	7300	1/29	52	14.6	12.7	18.9	14.0a
Lewis Lake Divide	10E9	7900	1/30	103	32.1	25.4	39.5	27.6a
Moran	10F4MP	6500	1/29	37	10.3	8.1	14.1	8.6a
Moran Bay	10F3	6800	1/29	49	14.2	12.9	20.9	13.6a
Pitchstone Plateau	10E16A	8640	2/1	121A	38.0e	25.5e	47.0e	
Snake River Station	10E12MP	6780	1/30	51	14.5	12.3	18.6	13.3a
Thumb Divide	10E7	7900	1/30	68	18.8	15.4	27.3	14.4a*
Two Ocean Plateau	10E17A	9200	2/1	87A	27.0e	18.5e	33.0e	

BFAR RIVER

Big Park	10G11A	8700	1/28	47	13.1	11.2	25.0	10.3*
CCC Camp	10G7	7500	1/30	31	8.4	5.4	13.4	7.8
Kelly R. S.	10G12MP	8200	1/28	39	11.0	9.6	21.7	
Poison Meadows	10G6A	8500	1/29	72	22.2	14.4	32.0e	18.7*
Salt River Summit	10G8MP	7900	1/30	41	11.2	8.5	16.6	10.2*

MISSOURI - CHEYENNE RIVER

Upper Spearfish <sup>s</sup>	3E1	6500	1/30	18	3.1	1.2	N.R.	4.7
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c Colorado Snow Courses.

m Montana Snow Courses.

s South Dakota Snow Courses.

u Utah Snow Courses.

\* Average does not contain  
15 years of record.

† Located close to divide.

M Soil moisture stack.

P Pearson precipitation gage.

A Aerial stadia marker.

e Water content estimated.

a Average partially estimated.



STATUS OF WYOMING RESERVOIR STORAGE - February 1, 1967  
IN 1000 ACRE FEET

BASIN or STREAM and RESERVOIR	TOTAL CAPACITY	TOTAL STORAGE 1967	INACTIVE STORAGE	ACTIVE CAPACITY	ACTIVE STORAGE		
					1967	1966	1948-62 Average
<u>SNAKE RIVER</u>							
Grassy Lake	15.4	--	0.3	15.1	--	--	--
Jackson Lake	--	--	Unknown	847.0	498.5	701.2	417.6
Palisades	1402.0	623.2	158.0	1244.0	465.2	1034.0	656.8
<u>NORTH PLATTE</u>							
Seminoe	1010.8	196.2	0.4	1010.4	195.8	474.3	473.5
Pathfinder	1015.9	145.6	0.0	1015.9	145.6	409.7	470.6
Guernsey	44.7	7.3	0.0	44.7	7.3	6.1	28.0
Alcova	188.9	154.8	158.5	30.4	-3.7	-2.7	-4.1
Glendo	795.2	316.8	11.5	783.7	305.3	319.8	239.7*
<u>LARAMIE RIVER</u>							
Wheatland	98.9	N.R.	5.8	93.1	--	N.R.	24.2*
<u>BELLE FOURCHE</u>							
Keyhole	340.4	118.6	9.7	191.5	108.9	125.9	0.9*
<u>WIND RIVER</u>							
Bull Lake	152.5	70.3	0.7	151.8	69.6	106.5	67.7
Pilot Butte	37.0	15.5	5.4	31.6	10.1	12.9	9.7
Boysen	952.4	596.3	252.1	549.9	344.2	345.9	219.4*
<u>BIG HORN RIVER</u>							
Anchor	17.4	0.0	0.2	17.2	0.0	-0.2	0.0*
<u>GREYBULL RIVER</u>							
Sunshine	52.4	N.R.	0.0	52.4	--	46.5	--
<u>SHOSHONE RIVER</u>							
Buffalo Bill	421.3	222.9	48.2	373.1	174.7	283.9	159.5
<u>BIG HORN RIVER</u>							
Yellowtail	1375.0	655.6	502.4	663.6	153.2	-337.2	--
<u>GREEN RIVER</u>							
Big Sandy	39.7	11.8	1.4	38.3	10.4	35.3	8.8
<u>KANSAS BASIN</u>							
Bonny <sup>c</sup>	170.2	40.0	2.9	167.3	37.1	36.3	36.6*
Swanson Lake <sup>n</sup>	254.0	99.8	14.0	240.0	85.8	105.8	73.6*

\* Less than 15 years of record in the 1948-62 period.

<sup>c</sup> Reservoirs located in Colorado

<sup>n</sup> Reservoirs located in Nebraska



STATUS OF RESERVOIR STORAGE - February 1, 1967  
IN 1000 ACRE FEET

BASIN or STREAM and RESERVOIR	TOTAL CAPACITY	TOTAL STORAGE 1967	INACTIVE STORAGE	ACTIVE CAPACITY	ACTIVE STORAGE		
					1967	1966	1948-62 Average
<u>KANSAS BASIN</u>							
Enders <sup>n</sup>	74.5	39.7	10.4	64.1	29.3	30.9	32.2*
Hugh Butler <sup>n</sup>	86.6	35.6	7.6	79.0	28.0	25.7	--
Harry Strunk <sup>n</sup>	89.3	37.4	9.5	79.8	27.9	27.2	25.9*
Norton <sup>k</sup>	134.7	29.1	2.9	131.8	26.2	27.5	--
Harlan County <sup>n</sup>	840.6	355.9	144.8	695.8	211.1	192.2	149.0*
Lovewell <sup>k</sup>	92.2	41.4	16.8	75.4	24.6	25.4	
Kirwin <sup>k</sup>	314.5	74.8	9.8	304.8	65.0	85.0	
Webster <sup>k</sup>	260.7	29.7	3.3	257.4	26.4	64.3	
Cedar Bluff <sup>k</sup>	377.0	154.6	35.3	341.7	119.3	148.8	142.1*
Kanopolis <sup>k</sup>	432.9	48.6	0.0	432.9	47.3	47.3	
 (SOUTH DAKOTA)							
<u>BELLE FOURCHE</u>							
Belle Fourche	192.0	93.6	6.8	185.2	86.8	149.9	61.8
 <u>CHEYENNE RIVER</u>							
Angostura	160.2	131.8	70.0	90.2	61.8	78.1	35.1*
Deerfield	15.7	14.7	0.6	15.1	14.1	14.6	10.2
Pactola	99.0	54.4	1.0	55.0	53.4	53.9	--
 <u>GRAND RIVER</u>							
Shadehill	357.4	115.2	58.2	81.5	57.0	42.2	67.8*

\* Less than 15 years of record in the 1948-62 period.

k Reservoirs located in Kansas

n Reservoirs located in Nebraska



# Agencies Cooperating in Wyoming Snow Surveys

## FEDERAL

U.S. Department of Agriculture  
Forest Service  
Soil Conservation Service

U.S. Department of Commerce  
Weather Bureau

U.S. Department of Interior  
Bureau of Reclamation  
Geological Survey  
National Park Service  
Indian Service

## STATE

State Engineer of Wyoming

University of Wyoming  
Natural Resources Research Institute  
Department of Agricultural Engineering

## PRIVATE

Irrigation Districts  
Greybull Valley Irrig. Dist.  
Wheatland Irrig. Dist.

Soil and Water Conservation Districts  
Bridger Valley SWCD  
Clouds Peak SWCD  
Cody SWCD  
Dubois-Crowheart SWCD  
Greybull Valley SWCD  
Lake DeSmet SWCD  
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